

Amendment to Claims

1-6. (Canceled)

7. (Withdrawn) An additional data generation method, for a computer that displays, on a display unit, an electronic service manual that includes document information and drawing information related to a predetermined product that includes an electric circuit or an electronic circuit that employs parts as components, whereby, when a user who browses the electronic service manual displayed on the display unit enters, into the computer, additional information related to the electronic service manual, the computer generates additional data based on the additional information, comprising:

a structure definition acquisition step of the computer obtaining structure definition information, in which a structure definition related to the additional information entered by the user is described and which is stored at a location the computer is capable of referencing; and

a structured data generation step of, based on the structure definition information obtained at the structure definition acquisition step, the computer employing the additional information to generate structured data that conforms to the structure definition.

8. (Withdrawn) The additional data generation method according to claim 7,

whereby, when a comment by the user is entered into the computer the additional information, at the structure definition acquisition step, my-note structure definition information, in which a structure definition related to the comment is described, is obtained as the structure definition information; and

whereby, when display setup change information for a graphics primitive included in a drawing for the electronic service manual is entered into the computer as the additional information, at the structure definition acquisition step, my-drawing structure definition information, in which a structure definition related to the display setup change information is described, is obtained as the structure definition information.

9-14. (Canceled)

15. (Withdrawn) An additional data generation program, which can be executed by a computer that displays, on a display unit, an electronic service manual that includes document information and drawing information related to a predetermined product that includes an electric circuit or an electronic circuit that employs parts as components, which permits the computer to generate additional data based on additional information when a user who browses the electronic service manual displayed on the display unit enters, into the computer, the additional information related to the electronic service manual, and which permits the computer to execute:

a structure definition acquisition step of obtaining structure definition information, in which a structure definition related to the additional information entered by the user is described and which is stored at a location the computer is capable of referencing; and

a structured data generation step of, based on the structure definition information obtained at the structure definition acquisition step, employing the additional information to generate structured data that conforms to the structure definition.

16. (Withdrawn) The additional data generation program according to claim 15,

whereby, when a comment by the user is entered into the computer the additional information, at the structure definition acquisition step, my-notes structure definition information, in which a structure definition related to the comment is described, is obtained as the structure definition information; and

whereby, when display setup change information for a graphics primitive included in a drawing for the electronic service manual is entered into the computer as the additional information, at the structure definition acquisition step, my-drawings structure definition information, in which a structure definition related to the display setup change information is described, is obtained as the structure definition information.

17-22. (Canceled)

23. (Withdrawn) An additional data generation apparatus, for displaying, on a display unit, an electronic service manual that includes document information and drawing information related to a predetermined product that includes an electric circuit or an electronic circuit that employs parts as components, and for generating additional data based on additional information when a user who browses the electronic service manual displayed on the display unit enters, into the computer, the additional information related to the electronic service manual, comprising:

structure definition acquisition means, for obtaining structure definition information, in which a structure definition related to the additional information entered by the user is described and which is stored at a location that is capable of being referenced; and

structured data generation means for, based on the structure definition information obtained at the structure definition acquisition step, employing the additional information to generate structured data that conforms to the structure definition.

24. (Withdrawn) The additional data generation apparatus according to claim 23,

wherein, when a comment by the user is entered into the computer the additional information, the structure definition acquisition means obtains, as the structure definition information, my-notes structure definition information, in which a structure definition related to the comment is described; and

wherein, when display setup change information for a graphics primitive included in a drawing for the electronic service manual is entered into the computer as the additional information, the structure definition acquisition means obtains, as the structure definition information, my-drawings structure definition information, in which a structure definition related to the display setup change information is described.

25-30. (Canceled)

31. (Withdrawn) A non-transitory recording medium on which recorded is an additional data generation program, which can be executed by a computer that displays, on a display unit, an electronic service manual that includes document information and drawing

information related to a predetermined product that includes an electric circuit or an electronic circuit that employs parts as components, which permits the computer to generate additional data based on additional information when a user who browses the electronic service manual displayed on the display unit enters, into the computer, the additional information related to the electronic service manual, and which permits the computer to execute:

a structure definition acquisition step of obtaining structure definition information, in which a structure definition related to the additional information entered by the user is described and which is stored at a location the computer is capable of referencing; and

a structured data generation step of, based on the structure definition information obtained at the structure definition acquisition step, employing the additional information to generate structured data that conforms to the structure definition.

32. (Withdrawn) The non-transitory recording medium on which recorded is an additional data generation program according to claim 31,

whereby, when a comment by the user is entered into the computer the additional information, at the structure definition acquisition step, my-notes structure definition information, in which a structure definition related to the comment is described, is obtained as the structure definition information; and

whereby, when display setup change information for a graphics primitive included in a drawing for the electronic service manual is entered into the computer as the additional information, at the structure definition acquisition step, my-drawings structure definition information, in which a structure definition related to the display setup change information is described, is obtained as the structure definition information.

33. (New) An electronic service manual generation method, for permitting a computer to generate an electronic service manual that includes document information and drawing information related to a predetermined product that includes an original data acquisition step of the computer obtaining original data serving as contents of the electronic service manual;

a structure definition acquisition step of the computer obtaining structure definition information, in which a structure definition for the electronic service manual is described and which is stored at a location the computer is capable of referencing; and

a structured data generation step of, based on the structure definition information obtained at the structure definition acquisition step, the computer employing the original data obtained at the original data acquisition step to generate structured data that is constituent data of the electronic service manual and that conforms to the structure definition,

whereby, when, at the original data acquisition step, data that serves as main text for the electronic service manual is obtained as the original data at the structure definition acquisition step, main text structure definition information in which a structure definition related to the main text is described is obtained as the structure definition information,

whereby, when, at the original data acquisition step, drawing data in which parts used for the predetermined product are illustrated are obtained as the original data, at the structure definition acquisition step, drawing structure definition information, in which a structure definition related to the drawing is described and which includes a structure definition to structure, as one group, graphics primitive data and attribute data indicating the graphics primitive data, is obtained as the structure definition information,

whereby, when, at the original data acquisition step, parts table data in which a list of the parts used for the predetermined product is described are obtained as the original data, at the structure definition acquisition step, parts table structure definition information, in which a structure definition related to the parts table is described, is obtained as the structure definition information, and

whereby, when, at the original data acquisition step, voltage value table data, in which a list of voltage values for the electric circuit or the electronic circuit used in the predetermined product is described, are obtained as the original data, at the structure definition acquisition step, voltage value table structure definition information, in which a structure definition related to the voltage value table is described, is obtained as the structure definition information.

34. (New) The electronic service manual generation method according to claim 33, whereby, when, at the original data acquisition step, IC function table data in which a list of functions of ICs employed for the predetermined product is described are obtained as the original data, at the structure definition acquisition step, IC function table structure definition information, in which a structure definition related to the IC function table is described, is obtained as the structure definition information.

35. (New) The electronic service manual generation method according to claim 33, whereby, when document data is obtained as the 25 original data at the original data acquisition step, at the structured data generation step, the structured data, in an XML format, is generated by using the document data; and

whereby, when drawing data is obtained as the original data at the original data acquisition step, at the structured data generation step, the structured data are generated in an SVG (Scalable Vector Graphics) format or an SVGZ (compressed SVG) format by using the drawing data.

36. (New) The electronic service manual generation method according to claim 33, comprising:

a parts-drawing correlation reference step, when at the original data acquisition step parts table data, in which a list of the parts used for the predetermined product is described, and parts drawing data that includes drawings related to the parts are obtained as the original data, of the computer comparing individual parts included in the list of the parts with the drawings wherein the individual parts are illustrated, and generating parts-drawing correlation information that includes the comparison results; and

a parts-drawing correlation addition step of, based on the parts-drawings correlation information generated at the parts-drawings correlation reference step, the computer embedding, in the parts table data, information about the parts written in the parts table data and the drawings that correspond to the parts.

37. (New) The electronic service manual generation method according to claim 33, comprising:

a parts-IC correlation reference step, when at the original data acquisition step parts table data, in which the list of the parts is written, and IC function table data, in which a list of functions of ICs employed for the predetermined product is written, are obtained as the original data, of the computer comparing individual parts included in the parts list with the functions of individual ICs in the list of the IC functions and generating parts-IC functions correlation information that includes the comparison results; and

a parts-IC correlation addition step, of, based on the parts-IC functions correlation information generated at the parts-IC correlation reference step, the computer embedding, in the parts table data, information about the parts written in the parts table data and about the IC functions that correspond to the parts.

38. (New) An electronic service manual generation program, for permitting a computer to generate an electronic service manual that includes document information and drawing information related to a predetermined product that includes an electric circuit, or an electronic circuit, that employs parts as components, and for permitting the computer to execute:

an original data acquisition step of obtaining original data serving as contents of the electronic service manual;

a structure definition acquisition step of obtaining structure definition information, in which a structure definition for the electronic service manual is described and which is stored at a location the computer is capable of referencing; and

a structured data generation step of, based on the structure definition information obtained at the structure definition acquisition step, employing the original data obtained at the original data acquisition step to generate structured data that is constituent data of the electronic service manual and that conforms to the structure definition,

whereby, when, at the original data acquisition step, data that serves as main text for the electronic service manual is obtained as the original data at the structure definition

acquisition step, main text structure definition information in which a structure definition related to the main text is described is obtained as the structure definition information,

whereby, when, at the original data acquisition step, drawing data in which parts used for the predetermined product are illustrated are obtained as the original data, at the structure definition acquisition step, drawing structure definition information in which a structure definition related to the drawing is described is obtained as the structure definition information,

whereby, when, at the original data acquisition step, parts table data in which a list of the parts used for the predetermined product is described are obtained as the original data, at the structure definition acquisition step, parts table structure definition information, in which a structure definition related to the parts table is described, is obtained as the structure definition information, and

whereby, when, at the original data acquisition step, voltage value table data, in which a list of voltage values for the electric circuit or the electronic circuit used in the predetermined product is described, are obtained as the original data, at the structure definition acquisition step, voltage value table structure definition information, in which a structure definition related to the voltage value table is described, is obtained as the structure definition information.

39. (New) The electronic service manual generation program according to claim 38,

whereby, when, at the original data acquisition step, IC function table data in which a list of functions of ICs employed for the predetermined product is described are obtained as the original data, at the structure definition acquisition step, IC function table structure definition information, in which a structure definition related to the IC function table is described, is obtained as the structure definition information.

40. (New) The electronic service manual generation program according to claim 38,

whereby, when document data is obtained as the original data at the original data acquisition step, at the structured data generation step, the structured data, in an XML format, is generated by using the document data; and

whereby, when drawing data is obtained as the original data at the original data acquisition step, at the structured data generation step, the structured data are generated in an SVG (Scalable Vector Graphics) format or an SVGZ (compressed SVG) format by using the drawing data.

41. (New) The electronic service manual generation program according to claim 38 that permits the computer to execute:

a parts-drawing correlation reference step, when at the original data acquisition step parts table data, in which a list of the parts used for the predetermined product is described, and parts drawing data that includes drawings related to the parts are obtained as the original data, of comparing individual parts included in the list of the parts with the drawings wherein the individual parts are illustrated, and generating parts- drawing correlation information that includes the comparison results; and

a parts-drawing correlation addition step, based on the parts-drawings correlation information generated at the parts-drawings correlation reference step, of embedding, in the parts table data, information about the parts written in the parts table data and the drawings that correspond to the parts.

42. (New) The electronic service manual generation program according to claim 38 that permits the computer to execute:

a parts-IC correlation reference step, when at the original data acquisition step parts table data, in which the list of the parts is written, and IC function table data, in which a list of functions of ICs employed for the predetermined product is written, are obtained as the original data, of comparing individual parts included in the parts list with the functions of individual ICs in the list of the IC functions and generating parts-IC functions correlation information that includes the comparison results; and

a parts-IC correlation addition step, based on the parts-IC functions correlation information generated at the parts-IC correlation reference step, of embedding, in the parts table data, information about the parts written in the parts table data and about the IC functions that correspond to the parts.

43. (New) An electronic service manual generation apparatus, for generating an electronic service manual that includes document information and drawing information related to a predetermined product that includes an electric circuit, or an electronic circuit, that employs parts as components, comprising:

original data acquisition means, for obtaining original data serving as contents of the electronic service manual;

structure definition acquisition means, for obtaining structure definition information, in which a structure definition for the electronic service manual is described and which is stored at a location that is capable of being referenced; and

structured data generation means for, based on the structure definition information obtained by the structure definition acquisition means, employing the original data obtained by the original data acquisition means to generate structured data that is constituent data of the electronic service manual and that conforms to the structure definition,

wherein, when the original data acquisition means obtains, as the original data, data that serves as main text for the electronic service manual, the structure definition acquisition means obtains, as the structure definition information, main text structuredefinition information in which a structure definition related to the main text is described,

wherein, when the original data acquisition means obtains, as the original data, drawing data in which parts used for the predetermined product are illustrated, the structure definition acquisition means obtains, as the structure definition information, drawing structure definition information in which a structure definition related to the drawing is described,

wherein, when the original data acquisition means obtains, as the original data, parts table data in which a list of the parts used for the predetermined product is described, the structure definition acquisition means obtains, as the structure definition information, parts table structure definition information, in which a structure definition related to the parts table is described, and

wherein, when the original data acquisition means obtains, as the original data, voltage value table data, in which a list of voltage values for the electric circuit or the electronic circuit used in the predetermined product is described, the structure definition acquisition means obtains, as the structure definition information, voltage value table structure definition information, in which a structure definition related to the voltage value table is described.

44. (New) The electronic service manual generation apparatus according to claim 43, wherein, when the original data acquisition means obtains, as the original data, IC function table data in which a list of functions of ICs employed for the predetermined product is described, the structure definition acquisition means obtains, as the structure definition information, IC function table structure definition information, in which a structure definition related to the IC function table is described.

45. (New) The electronic service manual generation apparatus according to claim 43, wherein, when document data is obtained as the original data by the original data acquisition means, the structured data generation means generates the structured data, in an XML format, by using the document data; and

wherein, when drawing data is obtained as the original data by the original data acquisition means, the structured data generation means generates the structured data, in an SVG (Scalable Vector Graphics) format or an SVGZ (compressed SVG) format, by using the drawing data.

46. (New) The electronic service manual generation apparatus according to claim 43, comprising:

parts-drawing correlation reference means for, when the original data acquisition means obtains, as the original data, parts table data, in which a list of the parts used for the predetermined product is described, and parts drawing data that includes drawings related to the parts, comparing individual parts included in the list of the parts with the

drawings wherein the individual parts are illustrated, and for generating parts-drawing correlation information that includes the comparison results; and

parts-drawing correlation addition means for, based on the parts-drawings correlation information generated at the parts-drawings correlation reference step, embedding, in the parts table data, information about the parts written in the parts table data and the drawings that correspond to the parts.

47. (New) The electronic service manual generation apparatus according to claim 43, comprising:

parts-IC correlation reference means for, when the original data acquisition means obtains, as the original data, parts table data, in which the list of the parts is written, and IC function table data, in which a list of functions of ICs employed for the predetermined product is written, comparing individual parts included in the parts list with the functions of individual ICs in the list of the IC functions, and for generating parts-IC functions correlation information that includes the comparison results; and

parts-IC correlation addition means for, based on the parts-IC functions correlation information generated by the parts-IC correlation reference means, embedding, in the parts table data, information about the parts written in the parts table data and about the IC functions that correspond to the parts.

48. (New) A non-transitory recording medium on which recorded is an electronic service manual generation program, for permitting a computer to generate an electronic service manual that includes document information and drawing information related to a predetermined product that includes an electric circuit, or an electronic circuit, that employs parts as components, and for permitting the computer to execute:

an original data acquisition step of obtaining original data serving as contents of the electronic service manual;

a structure definition acquisition step of obtaining structure definition information, in which a structure definition for the electronic service manual is described and which is stored at a location the computer is capable of referencing; and

a structured data generation step of, based on the structure definition information obtained at the structure definition acquisition step, employing the original data obtained at the original data acquisition step to generate structured data that is constituent data of the electronic service manual and that conforms to the structure definition,

whereby, when, at the original data acquisition step, data that serves as main text for the electronic service manual is obtained as the original data at the structure definition acquisition step, main text structure definition information in which a structure definition related to the main text is described is obtained as the structure definition information,

whereby, when, at the original data acquisition step, drawing data in which parts used for the predetermined product are illustrated are obtained as the original data, at the structure definition acquisition step, drawing structure definition information, in which a structure definition related to the drawing is described and which includes a structure definition to structure, as one group, graphics primitive data and attribute data indicating the graphics primitive data, is obtained as the structure definition information,

whereby, when, at the original data acquisition step, parts table data in which a list of the parts used for the predetermined product is described are obtained as the original data, at the structure definition acquisition step, parts table structure definition information, in which a structure definition related to the parts table is described, is obtained as the structure definition information, and

whereby, when, at the original data acquisition step, voltage value table data, in which a list of voltage values for the electric circuit or the electronic circuit used in the predetermined product is described, are obtained as the original data, at the structure definition acquisition step, voltage value table structure definition information, in which a structure definition related to the voltage value table is described, is obtained as the structure definition information.

49. (New) The non-transitory recording medium on which recorded is an electronic service manual generation program according to claim 48,

whereby, when, at the original data acquisition step, IC function table data in which a list of functions of ICs employed for the predetermined product is described are obtained

as the original data, at the structure definition acquisition step, IC function table structure definition information, in which a structure definition related to the IC function table is described, is obtained as the structure definition information.

50. (New) The non-transitory recording medium on which recorded is an electronic service manual generation program according to claim 48,

whereby, when document data is obtained as the original data at the original data acquisition step, at the structured data generation step, the structured data, in an XML format, is generated by using the document data; and

whereby, when drawing data is obtained as the original data at the original data acquisition step, at the structured data generation step, the structured data are generated in an SVG (Scalable Vector Graphics) format or an SVGZ (compressed SVG) format by using the drawing data.

51. (New) The non-transitory recording medium on which recorded is an electronic service manual generation program according to claim 48 that permits the computer to execute:

a parts-drawing correlation reference step, when at the original data acquisition step parts table data, in which a list of the parts used for the predetermined product is described, and parts drawing data that includes drawings related to the parts are obtained as the original data, of comparing individual parts included in the list of the parts with the drawings wherein the individual parts are illustrated, and generating parts-drawing correlation information that includes the comparison results; and

a parts-drawing correlation addition step, based on the parts-drawings correlation information generated at the parts-drawings correlation reference step, of embedding, in the parts table data, information about the parts written in the parts table data and the drawings that correspond to the parts.

52. (New) The non-transitory recording medium on which recorded is an electronic service manual generation program according to claim 48 that permits the computer to execute:

a parts-IC correlation reference step, when at the original data acquisition step parts table data, in which the list of the parts is written, and IC function table data, in which a list of functions of ICs employed for the predetermined product is written, are obtained as the original data, of comparing individual parts included in the parts list with the functions of individual ICs in the list of the IC functions and generating parts-IC functions correlation information that includes the comparison results; and

a parts-IC correlation addition step, based on the parts-IC functions correlation information generated at the parts-IC correlation reference step, of embedding, in the parts table data, information about the parts written in the parts table data and about the IC functions that correspond to the parts.